

ABSTRACT

An alignment method capable of performing alignment
5 without providing alignment marks on a mask and
preventing a decline of exposure throughput and latent
image contrast, an alignment substrate and the production
method, an exposure method, an exposure apparatus and a
production method of a mask are provided. An alignment
10 method including a step of transmitting a light or a
charged particle beam from a first surface side of a thin
film to a second surface side, reflecting the light or
charged particle beam on a plurality of alignment marks
arranged on the second surface side of the thin film but
15 outside the thin film, detecting the reflected light or
charged particle beam on the first surface side, and
detecting positions of the alignment marks, and a step of
obtaining position coordinates on the thin film; an
alignment substrate used for the alignment method and a
20 production method thereof, an exposure method for
performing the alignment, an exposure apparatus and a
production method of a mask.